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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,478	05/23/2001	Scott C. Miller	2171A	2993

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Milliken & Company
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/864,478	Applicant(s) MILLER ET AL.	
	Examiner Cheryl Juska	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-161 is/are pending in the application.
- 4a) Of the above claim(s) 103-109 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-161 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>02-02</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group 1, claims 1-102 and 110-161 in the paper filed June 6, 2003, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 103-109 are hereby withdrawn as being non-elected.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-102, 110-138, and 150-161 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The terms "low face weight," "light weight," "low weight primary carpet," and "thin cushion backing" in the independent claims are relative terms which render the claim indefinite. Although the values of said terms are described in dependent claims and the specification, these values cannot be read into the definition of said terms. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, relative terminology cannot be relied upon to distinguish patentability. It is suggested that the limitations

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of the face weight and the cushion weight be amended into the independent claims as needed to clarify what is meant by said relative terms.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-10, 18, 20, 21, 24, 25, 32-42, 46, 50, 52, 53, 60, 62-65, 73, 75-84, 91, 92, 97, 98, 111, 114-118, 122-138, and 156-161 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,522,857 issued to Higgins.

Higgins '857 discloses a carpet tile with a stabilizing material embedded in an adhesive layer (title). Specifically, Higgins '857 teaches a tufted or bonded carpet comprising a primary carpet base 12 bonded to a foam cushion layer 14 via an adhesive layer 16 (abstract and col. 1, lines 26-33 and Figure 1). The adhesive layer includes a reinforcing glass scrim 18 embedded therein (col. 1, lines 26-33 and Figure 1). The adhesive layer may be a thermoplastic (i.e., hot melt) adhesive layer present in an amount ranging from 10-70 oz/yd², preferably about 50 oz/yd² (col. 1, lines 48-52). The cushion layer may be a polyurethane foam and range from 0.1" to 1.0" in thickness and 10-60 oz/yd² (col. 2, lines 1-6). Higgins '857 also teaches the presence of a latex pre-coat applied to the backloops of yarns tufted into the primary backing (col. 1, lines 37-38).

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With respect to Applicant's limitations that the primary carpet has a "low face weight" and the cushion is "thin" or "light weight," it is argued that these limitations are inherently met by the Higgins '857 disclosure since said limitations are relative recitations. Thus, the Higgins '857 is inherently "low or light weight" in comparison to an article of a heavier weight and inherently "thin" in comparison to an article of a thicker material.

With respect to the limitation of claim 8, wherein the cushion layer is 'about 0.04 to 0.09" thick,' it is asserted that the recitation of 'about 0.09' includes Higgins '857 teaching of 0.1".

With respect to claim 14, wherein the cushion is limited to an unfilled polyurethane, it is noted that Higgins '857 is silent about the use of fillers.

With respect to the recitations to relative functional properties, such as having resiliency, comfort, uniformity, constant shade, durability, low crush, good seamability and being aesthetically pleasing, , it is asserted that said functional properties are inherently met by the Higgins '857 disclosure. For example, a foam cushion backing inherently has *at least some degree* of resiliency and under foot comfort as recited in claim 20.

With respect to the recited physical properties, said properties are deemed to be inherent to the invention of Higgins '857. Specifically, it is asserted that the claimed Gmax test, resilience rating, Appearance Retention Rating, color change test, pile height retention, and overall appearance change properties are inherently met since said properties are dependent upon the chemical and structural features of the invention. The Higgins' carpets anticipate applicant's chemical and structural limitations, and as such, the resulting properties must also be inherent. The burden is upon Applicant to prove otherwise.

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Therefore, claims 1, 3-10, 18, 20, 21, 24, 25, 32-42, 46, 50, 52, 53, 60, 62-65, 73, 75-84, 91, 92, 97, 98, 111, 114-118, 122-138, and 156-161 are anticipated by the cited Higgins '857 reference.

6. Claims 1, 3, 5, 14, 18-25, 27, 32, 35-39, 46, 50-53, 55, 60, 62, 69, 73-75, 77-84, 86, 89, 91-98, 100-102, 111-118, 122-138, and 156-161 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,540,968 issued to Higgins.

Higgins '968 discloses a cushioned back carpet tile with a stabilizing nonwoven backing (title). The carpet comprises a tufted primary backing having a latex pre-coat thereon (col. 3, lines 53-58). Additionally, a hot melt adhesive layer may contain a fiberglass scrim reinforcement layer (col. 4, lines 42-44). A foam cushion backing layer is bonded to the primary backing via the hot melt layer. Furthermore, a nonwoven felt layer of polyester and polypropylene is attached to said foam cushion layer in order to stabilize the carpet (abstract). The foam cushion layer may be a polyurethane foam having a density ranging from 12-20 lbs/ft³ (col. 6, lines 28-39). The foam layer may also have a layer of reinforcement at least partially embedded therein (col. 6, lines 21-27). As discussed above, Applicant's recitations to "low face weight" and "thin" or "light weight," it is argued that these limitations are inherently met by the Higgins '968 disclosure since said limitations are relative recitations.

Similarly, with respect to the recitations to relative functional properties, as noted above, it is asserted that said functional properties are inherently met by the Higgins '968 disclosure.

With respect to claim 152, the Higgins '968 carpet may be patterned before or after cutting into tiles (col. 6, lines 40-42).

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With respect to the recited physical properties, said properties are deemed to be inherent to the invention of Higgins '968. Specifically, it is asserted that the claimed Gmax test, resilience rating, Appearance Retention Rating, color change test, pile height retention, and overall appearance change properties are inherently met since said properties are dependent upon the chemical and structural features of the invention. The Higgins' carpets anticipate applicant's chemical and structural limitations, and as such, the resulting properties must also be inherent. The burden is upon Applicant to prove otherwise.

Therefore, claims 1, 3, 5, 14, 18-25, 27, 32, 35-39, 46, 50-53, 55, 60, 62, 69, 73-75, 77-84, 86, 89, 91-98, 100-102, 111-118, 122-138, and 156-161 are anticipated by the cited Higgins '968 patent.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 31, 59, 61, 90, 103, 104, 108, 110, 119-121, 139-155 are rejected under 35 USC 103(a) as being unpatentable over the cited Higgins '857 patent or the cited Higgins '968 patent in view of EP 048 986 issued to Porter et al.

Both Higgins patents are silent about the face weight of the primary carpet base. However, the presently claimed face weight of less than 20 oz/yd², preferably less than or equal to 15 oz/yd² is well known in the art. For example, Porter teaches a polyurethane foam backed

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carpet having a nylon pile face weight of 14 oz/yd² (page 11, lines 22-30). Thus, it would have been obvious to one to choose a face weight as claimed in order to produce a light weight, yet durable and aesthetically pleasing carpet.

Additionally, it is argued that the limitation that the carpet is jet dyed is a method limitation in an article claim. As such, it is not given patentable weight at this time since the method of dyeing does not effect the final product in a manipulative sense. In other words, any method of dyeing still produces a final product of a dyed carpet.

Therefore, claims 2, 31, 59, 61, 90, 103, 104, 108, 110, 119-121, 139-155 are rejected.

9. Claims 11, 13, 17, 43, 45, 49, 66, 68, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 or Higgins '968 patent in view of EP 309 816 issued to Turner et al.

Said claims limit the foam cushion layer to having filler present in amounts of 110, 190, and 15 parts by weight. Neither of the Higgins patents teach the use of a filler. However, fillers in foam cushions are very well-known in the carpet art. For example, Turner teaches the use of an inorganic filler in an amount ranging from 5-500 parts by weight (page 4, lines 54-58). Thus, it would have been obvious to include a filler in the carpets of Higgins' in order to reduce the amount of foam employed and to improve flame resistance.

With respect to the claims which limit the cushion to a weight less than that taught by Higgins '857, it is argued that said claim is still obvious over the prior art since cushion weights within the presently claimed range are known in the art. Specifically, Turner teaches a polyurethane foam cushion layer for a carpet may range from 5-500 oz/yd². Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

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decrease the amount of foam present, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. in this case, a decrease in the amount of foam cushion present, would result in a lighter weight carpet which is easier to handle and install.

10. Claims 12, 15, 16, 44, 47, 48, 67, 70, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 or Higgins '968 patent in view of the cited Porter reference.

Said claims recite foam densities less than those taught by Higgins '968. However, foam densities of about 6-9 lb/ft³ are known in the art. For example, Porter teaches a polyurethane foam having a density of less than 13 lb/ft³ (page 5, lines 32-34). Therefore, it would have been obvious to one skilled in the art to employ a foam having the density taught by Porter as the foam of either Higgins '968 or Higgins '857 in order to produce a carpet having reduced weight and cost.

11. Claims 4, 5, 7-10, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '968 patent in view of the Higgins '857 patent.

Higgins '968 is silent with respect to the amount of hot melt present. However, as noted above, Higgins '857 teaches said the hot melt layer may be in the range of 10-70 oz/yd². Thus, it would have been obvious to employ the hot melt adhesive layer in an amount as taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a strong bond between the primary backing and the foam cushion of the carpet tile.

Additionally, Higgins '968 is silent with respect to the thickness of the foam cushion layer. However, as noted above, Higgins '857 teaches said foam layer may be in the range of

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0.1-1.0 inches. Thus, it would have been obvious to employ a foam having the thickness taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a light weight, yet resilient carpet tile.

Furthermore, Higgins '968 is silent with about the weight of the foam cushion layer. However, as noted above, Higgins '857 teaches said foam layer may be in the range of 10-60 oz/yd². Thus, it would have been obvious to employ a foam having the basis weight taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a light weight, yet resilient carpet tile.

12. Claim 99 is rejected under 35 U.S.C. 103(a) as being unpatentable over either the cited Higgins '857 patent or Higgins '968 patent in view of US 6,089,007 issued to Hamilton et al.

Higgins '857 and Higgins '968 are silent with respect to the use of bitumen layer an adhesive layer of a carpet tile. However, said use is well-known in the art. For example, Hamilton teaches adhesive layers may include vinyl resins, thermoplastic hot melts, bitumen, or modified bitumen (col. 4, lines 25-36). Thus, it would have been obvious to employ a bitumen composition as the adhesive layer of the Higgins '857 or Higgins '968 carpet tiles with the expectation of producing a strong bond between the primary backing and the foam cushion of the carpet tile.

13. Claims 26, 28-30, 54, 56-58, 85, 87, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '968 patent in view of the Higgins '857 patent.

Higgins fails to teach yarn denier and non-heatset yarn as presently claimed. However, these features are well-known in the art of carpet. Applicant is hereby given Official Notice of this fact. Thus, it would have been obvious to one skilled in the art to select the claimed yarn

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denier and non-heatset structure of the yarn in order to produce a commercially acceptable carpet having the desired softness and resiliency.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


CHERYL A. JUSKA
PRIMARY EXAMINER

cj
September 8, 2003